NAME_____

89.456 - APPLIED GEOPHYSICS
CHAPTER 2 PROBLEM

An energy source is emitting P- and S-waves with a frequency of 35 Hz. In a sandstone layer the velocity of the P-wave is 3200 m s^{-1} and the velocity of the S-wave is 1600 m s^{-1}. The absorption coefficient is 0.55 db $wavelength^{-1}$.

1. Given an initial energy at the source of 10 db, calculate the energy of the P- and S-wave at a distance of 120 m.

2. Check your answers using the spreadsheet for Table 2-6.